

1. SOME THINGS TO KNOW AT THE START

Introduction to this Handbook

Any person responsible for the discharge of a pollutant into the Waters of the United States from any point source must apply for and obtain a permit under the National Pollutant Discharge Elimination System (NPDES) program. Authority to approve or deny NPDES permits resides with the U.S. Environmental Protection Agency (EPA), or with State agencies in States which have been delegated NPDES permitting authority by EPA.

Where EPA is the agency directly responsible, and where the discharge is classified as a "new source", then EPA's permitting process is subject to the National Environmental Policy Act (NEPA). NEPA also applies when EPA is deciding if a discharge may be covered under an already existing "General" NPDES permit. In cases where NEPA applies, EPA expects the Permit Applicant to begin the environmental review process by preparing an Environmental Information Document, or EID.

Many persons may not be sure if they need an NPDES permit and/or an EID. Therefore, those responsible for new projects should contact EPA early in project planning, to determine whether a new source permit and/or EID are required; and to discuss the role of environmental considerations in project planning. To discuss the potential requirements for an EID, and the need for environmentally sound planning, call EPA's Office of Planning and Coordination, 214-665-2258a. Questions about the NPDES permit itself should be addressed to NPDES Permits Branch of the Water Quality Protection Division at 214-665-7170.

This Handbook provides guidance for preparing an EID. The Handbook was written for Region 6 of the U.S. Environmental Protection Agency, which

a = phone numbers were valid as of September, 1995. The term "NPDES" isn't expected to change, so if you have a problem reaching the right people, just call the general information number (214-665-6548) of EPA Region 6 in Dallas, and at EPA, ask for the "NPDES permit program" or the "NEPA Program". To review the regulations which apply to NPDES permits. see Volume 40, Part 122 of the Code of Federal Regulations

currently (1995) issues NPDES permits for wastewater discharges in Louisiana, New Mexico, Oklahoma and Texas. (Arkansas has been delegated NPDES permitting authority; NEPA compliance is not required for NPDES permits in Arkansas.) Those who use the Handbook are assumed to have a good background in environmental studies and impact analysis. The Handbook is not a training manual for impact assessment; but an explanation of what EPA needs to see in an EID.

The entire Handbook should be reviewed before an EID is prepared. If the Handbook does not answer your questions about the EID, call EPA's Office of Planning and Coordination, at the number indicated above.

The Handbook contains three chapters.

- Chapter 1 explains WHY the EID submittal is needed. It includes a brief introduction to NEPA, the law under which EPA conducts its environmental reviews; and it explains how EIDs are used by EPA.
- Chapter 2 discusses WHAT the EID needs to contain, with respect to project description, environmental setting, environmental protection, impact analysis, cumulative impacts and coordination.
- Chapter 3 gives suggestions about HOW the EID should be put together. It provides ideas for organizing the submittal, and tips on how to present the information in the most effective way, including suggestions for the use of maps, graphics and tables.

The National Environmental Policy Act

The National Environmental Policy Act (NEPA) was signed into law on January 1, 1970. Appendix A of this Handbook contains a copy of NEPA. NEPA establishes policy, goals and some procedures for the protection, maintenance and enhancement of the U.S. environment. NEPA requires EPA and other Federal agencies to:

- take environmental factors into account when making certain decisions (such as the decision to issue or deny a new source NPDES permit);

- make a clear and reasonably complete record of how the environmental factors were considered in the decision.

The U.S. Council on Environmental Quality was established by NEPA, and in turn has developed regulations for implementing NEPA. These regulations can be found at Volume 40, Parts 1500-1508 of the *Code of Federal Regulations*, and are provided here in Appendix B.

NEPA is most effective when it leads to the selection of alternatives -including mitigation measures -- which reduce environmental impacts. An act is an environmental change - a change to land, air, water, plants, animals and/or the human condition caused by a project. Do not equate the term "impact" with "bad effect". Some impacts are negative, while others can be positive. Moreover, only some impacts are large and significant; many others are small and relatively unimportant.

Virtually all projects have impacts, if only through the use of natural resources or the disposal of waste materials. The fact that a project has impacts does not mean that it is ill-advised or ineligible for an NPDES permit.

A principle objective of NEPA is to force Federal agencies (and those regulated by Federal agencies) to design, locate and operate their projects in ways which reduce adverse environmental impacts, and which increase the positive impacts. Thus, a principle focus of NEPA is on alternatives -- on seeing that project choices are environmentally sound.

Environmental assessments and impact statements

EPA can conduct two levels of NEPA analysis, depending on the impacts of a project.

- For smaller or simpler projects, EPA usually prepares an Environmental Assessment(EA). Based on the Assessment, EPA determines if its permitting decision has the potential for significant impacts on the environment. In most cases, the result is that EPA issues a Finding of No Significant Impact (FNSI).

- If EPA determines in advance that a project has potential significant impacts, or if it identifies such impacts through the EA, then EPA will prepare an Environmental Impact Statement (EIS) to evaluate the project and its alternatives. An EIS is more detailed than an EA, and its preparation involves more public involvement, including at least one public hearing.

EPA's approach to preparing an EA depends on the type of project and its location. However, all EA's cover certain basic subjects as illustrated in Tables 1-1 and 1-2.

- Table 1-1 is the outline of a recent EA on a Concentrated Animal Feeding Operation, and is organized so that all aspects of the affected environment are discussed first; the main part of the EA is a discussion of impacts, organized according to the category of environmental resource.
- Table 1-2 is the outline of a recent EA on a small surface coal mine; here the primary organization is by resource, so that information on the environmental setting and impacts are presented together.

The outline in Table 1-1 helps concentrate the discussion on impacts, rather than general environmental conditions; the outline in Table 1-2 may be easier to follow for the general public.

Environmental information document

Even though EPA has ultimate responsibility for compliance with NEPA, ***the burden of providing EPA with basic information about a project and its environmental effects falls on the permit applicant.*** The EID is the document which provides the necessary information. The most typical sequence of documents is as follows:

- APPLICANT PREPARES EID
2. EPA PREPARES EA
3. EPA ISSUES FNSI OR DECIDES TO PREPARE AN EIS

Region 6 provided some guidance on EIDs in Volume 58 of the Federal Register, No. 24, at pages 7639-40. Similarly, some states have developed suggestions

about EIDS; an example is in a State of Oklahoma brochure which describes Concentrated Animal Feeding Operations. The information in this Handbook provides a more complete discussion of what EPA requires from Applicants than is found in the Federal Register or State documents.

Thus, notwithstanding the 1-page outline contained in the Federal Register, there is no specified format or checklist for preparing an EID. What is important is that the EID present the necessary information (see Chapter 2), organized so that EPA can use it effectively (see Chapter 3). The better the EID submittal, the less time it will take for EPA to review the project, and the less delay will occur while EPA acquires missing information.

The following hypothetical examples illustrate the importance of information in the EID. Each example concerns the discussion of ground water impacts from a large dairy.

- One example is an EID in which ground water impacts are not mentioned. In this case, EPA will ask the Applicant for information on this subject, delaying the EA.
- Another example is an EID in which ground water impacts are stated to be "insignificant" because "proper management procedures will be followed", but there is little or no information on the aquifer or the management program. In such a case, EPA will ask the Applicant to document its claim, with details, which may delay the EA.
- A different example is an EID which describes the flow system and quality of water in the aquifer beneath the dairy, and also provides details on all proposed pollution prevention measures (e.g. characteristics of the wastewater lagoon liner; nutrient budget for land application of wastes). Assuming EPA agrees with the information provided, the agency can proceed to write the ground water section of its EA.

It is important to submit the EID as early as possible in the NPDES permitting process, as EPA generally needs several months to complete all the steps required for its environmental review. EA's which lead to a FNSI average 4-6 months and EISs average 18-24 months to complete.

Finding of No Significant Impact

EPA's initial decision to prepare an EA rather than an EIS does not ensure that a project will receive a "Finding of No Significant Impact". EPA can not issue such a finding unless the submittals are sufficient to allow a thorough examination of the project, and the documentation demonstrates the absence of potential significant impact(s).

The decision to issue a FNSI or to prepare an EIS is often difficult. In making the decision, EPA considers the part of the NEPA regulations which talk about the meaning of the word "significance"; these regulations are included in Appendix B (see 40 CFR 1508.27). Beyond the formal guidance in the regulations, it is generally the case that impacts are more likely to be judged as potentially significant if they:

- affect protected environmental resources, such as wetlands, floodplains, prime farmlands, cultural properties, threatened and endangered species;
- affect public health and safety, neighborhood character, lands of public value (such as parks and preserves) and/or regional growth and investment;
- involve a high degree of uncertainty, risk and/or controversy;
- conflict with established plans or 'policies';
- establish a precedent, and/or foreclose future opportunities;
- have the potential to cause violations of environmental laws and regulations.

It is often the case that a project has potential significant environmental impacts, but these impacts are reduced to "insignificant" levels by various actions undertaken by the Applicant. Example: a coal mine in

Oklahoma proposes to mine through habitat known to be occupied by the endangered American Burying Beetle; the impact is reduced to an insignificant level because all the beetles are trapped and relocated to prime habitat before mining starts.

EPA takes its duties under NEPA very seriously, and expects good environmental performance from those whom it regulates under NPDES permits. This means that projects which undergo NEPA review should not result in significant environmental harm at the outset; and mitigation of significant adverse impacts needs to be effective. See Chapter 2 for a discussion of ways in which project impacts can be minimized, through consideration of project alternatives, and through implementation of measures for pollution prevention and impact mitigation.

In summary, EPA's environmental review identifies all the impacts of a project which have the potential to be significant. To help get this job done, the Applicant's EID is critical in providing EPA with information which is current, accurate and complete. If the final result of EPA's review is a Finding of No Significant Impact, then no further environmental review is required.